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Logistics

Implementation of Performance- Based Logistics for the Javelin Weapon System (D-2005-037)

Department of Defense
Office of the Inspector General

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Acronyms

BCA	Business Case Analysis
DASA(ILS)	Deputy Assistant Secretary of the Army (Integrated Logistics Support)
DUSD(L&MR)	Deputy Under Secretary of Defense (Logistics and Materiel Readiness)
EA	Economic Analysis
JV	Joint Venture
LCCS	Life-Cycle Contractor Support
ODASA-CE	Office of the Deputy Assistant Secretary of the Army (Cost and Economics)
PBA	Performance-Based Agreement
PBL	Performance-Based Logistics
PMO	Project Management Office
USD(AT&L)	Under Secretary of Defense for Acquisition, Technology, and Logistics



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March 7, 2005

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION,
TECHNOLOGY, AND LOGISTICS
AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Report on Implementation of Performance-Based Logistics for the Javelin
Weapon System (Report No. D-2005-037)

We are providing this report for information and use. We considered management comments on a draft version of this report when preparing the final report. As a result of management comments and further discussions, we revised finding A to clarify our intention and deleted draft Recommendation A.1. We also renumbered draft Recommendations A.2.a. and A.2.b. to A.1. and A.2.

We considered management comments to be responsive and in conformance with the requirements of DoD Directive 7650.3. Therefore, additional comments are not required.

We appreciate the courtesies extended to the staff. Questions should be directed to Mr. Robert F. Prinzbach at (703) 604-8907 (DSN 664-8907) or Mr. Keith A. Yancey at (703) 604-8774 (DSN 664-8774). See Appendix C for the report distribution. The team members are listed inside the back cover.

By direction of the Deputy Inspector General for Auditing:

Michael A. Joseph
Acting Assistant Inspector General
for Readiness and Logistics Support

Department of Defense Office of Inspector General

Report No. D-2005-037
(Project No. D2004LH-0047)

March 7, 2005

Implementation of Performance-Based Logistics for the Javelin Weapon System

Executive Summary

Who Should Read This Report and Why? DoD personnel and Government contractors who are responsible for implementing performance-based logistics (PBL) should read this report. This report discusses the status of PBL implementation for the Javelin weapon system.

Background. PBL is a strategy for weapon system product support that employs the purchase of support as an integrated performance package designed to optimize system readiness. PBL delineates outcome performance goals of weapon systems, ensures that responsibilities are assigned, and provides incentives for attaining those goals for the life of the weapon system. The life-cycle management of a weapon system ensures its reliability, supportability, and total ownership cost. PBL is the DoD-preferred approach for providing logistics support to weapon systems.

The Defense Planning Guidance for FYs 2003 through 2007 requires that each Military Department submit a plan that identifies its implementation schedule for applying PBL to all new weapon systems and all Acquisition Category I and II fielded systems. As of August 23, 2004, the Military Departments reported 257 systems, sub-systems, or components as having implemented PBL.

The Javelin weapon system, an Acquisition Category I program, is a medium-range, infrared-imaging, fire and forget, man-portable, antitank weapon system developed for the Army and the Marine Corps. It is composed of a tactical round and a command launch unit. The Javelin weapon system was designed, developed, and fabricated by the Raytheon and Lockheed Martin Javelin Joint Venture. In July 2002, the Army reported that PBL had been implemented for the Javelin weapon system.

Results. The Army reported a PBL strategy for the Javelin weapon system to the Under Secretary of Defense for Acquisition, Technology, and Logistics. However, the strategy was not fully implemented as described in the Army's July 8, 2002, PBL implementation schedule. As a result, the Army might not be realizing the benefits of PBL for the Javelin weapon system, such as improved readiness and decreased maintenance cost, and might be overstating its PBL progress. The Project Manager, Close Combat Weapon Systems Project Office, as the project management office, should update performance-based agreements with warfighters and modify the Javelin weapon system life-cycle contract to incorporate provisions for incentives and penalties that would support PBL (finding A).

The project management office's decision to award the life-cycle contractor support contract to the Raytheon and Lockheed Martin Javelin Joint Venture was based on an economic analysis that was unsupported and incomplete. As a result, the best alternative

for life-cycle support of the Javelin weapon system might not have been selected. The Project Manager, Close Combat Weapon Systems Project Office should update the economic analysis and incorporate it into a business case analysis for the Javelin weapon system. Further, based on the revised baseline cost estimate, the project management office should reassess logistics support strategies for the Javelin weapon system after the Deputy Assistant Secretary of the Army (Cost and Economics) validates the business case analysis (finding B).

The recommendations in this report, if implemented, will correct the material management control weaknesses we identified. See the Findings section of the report for the detailed recommendations.

Management Comments and Audit Response. The Acting Deputy Under Secretary of Defense (Logistics and Materiel Readiness) and the Army disagreed with our draft finding that the Javelin weapon system was incorrectly reported as PBL. After reviewing management comments and further discussion with personnel from the Office of the Deputy Under Secretary of Defense (Logistics and Materiel Readiness), we revised the finding to clarify our intention and deleted the draft recommendation that the Army cease reporting that it had implemented performance-based logistics for the Javelin weapon system.

The Army partially concurred with our recommendation to update performance-based agreements with warfighters and stated that the Army is developing a policy on performance-based agreements with the intent being to allow flexibility in using several existing documents to satisfy the performance-based agreement requirement. Once approved, the Javelin project manager will update materiel fielding agreements as necessary. In addition, the Army partially concurred with our recommendation to modify the life-cycle contract for the Javelin weapon system and stated that when Javelin program requirements require a change in the life-cycle contractor support contract, the project management office will reevaluate incentives and penalties in the contract.

The Army partially concurred with our recommendation to update the economic analysis and stated that the economic analysis would be updated to a business case analysis when contract situations require it. The Army concurred with our recommendation to fully validate the business case analysis for the Javelin weapon system and to formally document the results and conclusions of that validation.

We considered management comments to be responsive. See the Findings section of the report for a discussion of management comments and the Management Comments section for the complete text of comments.

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Background

Performance-Based Logistics. Performance-based logistics (PBL) is the DoD-preferred approach for implementing product support. PBL is a strategy for weapon system product support that employs the purchase of support as an integrated performance package designed to bring increased levels of system readiness. PBL describes performance goals for weapon system readiness and encourages the creation of incentives for attaining those goals through clear lines of authority and responsibility. PBL delineates outcome performance goals of weapon systems, ensures that responsibilities are assigned, and provides incentives for attaining those goals for the overall life-cycle management of system reliability, supportability, and total ownership cost. The Under Secretary of Defense for Acquisition, Technology, and Logistics (USD[AT&L]) assigned the Assistant Deputy Under Secretary of Defense (Logistics Plans and Programs) the responsibility to provide oversight for the implementation of PBL within DoD.

In September 2001, the “Quadrennial Defense Review”¹ mandated implementation of PBL and modern business systems with appropriate metrics to compress the supply chain, eliminate steps that were “non-value-added” steps, and improve readiness for major weapon systems. In Department of Defense Inspector General Report No. D-2004-110, “The Military Departments’ Implementation of Performance-Based Logistics in Support of Weapon Systems,” August 23, 2004, we reported that the Military Departments had 257 systems, sub-systems, or components reported as having implemented PBL.

Under Secretary of Defense for Acquisition, Technology, and Logistics Memorandum. USD(AT&L) issued a memorandum, “Performance-Based Logistics,” February 13, 2002, which states that the Defense Planning Guidance for FYs 2003 through 2007 requires that each Military Department submit a plan that identifies its implementation schedule for applying PBL to all new weapon systems and all Acquisition Category² I and II fielded systems. The Military Departments were to prepare and submit their PBL plans to USD(AT&L) by May 1, 2002, for review and monitoring. The Assistant Secretary of the Army (Acquisition, Logistics, and Technology) submitted the Javelin PBL strategy on July 8, 2002.

DoD Directive 5000.1. DoD Directive 5000.1, “The Defense Acquisition System,” May 12, 2003, states that “PMs [program managers] shall develop and implement performance-based logistics strategies that optimize total system availability while minimizing cost and logistics footprint.” The Directive also

¹ The Quadrennial Defense Review serves as the overall strategic planning document for DoD, as required by Public Law 103-62, “Government Performance and Results Act of 1993.”

² The acquisition category determines an acquisition program’s level of review, decision authority, and applicable procedures. Acquisition Category I programs are acquisition programs with an estimated total expenditure for research, development, test, and evaluation of more than \$365 million or procurement of more than \$2.19 billion. Acquisition Category II programs have an estimated total expenditure for research, development, test, and evaluation of \$365 million or less but more than \$140 million or procurement of \$2.19 billion or less but more than \$660 million.

requires that the program manager for a system be the single point of accountability for accomplishing program objectives for the system's life-cycle management, including sustainment.

Spectrum of PBL Strategies. According to the Office of the Deputy Under Secretary of Defense (Logistics and Materiel Readiness) (DUSD[L&MR]) guide, "Product Support for the 21st Century: A Program Manager's Guide to Buying Performance" (Product Support Guide), November 6, 2001, a PBL strategy seeks to maintain the appropriate level of flexibility and agility to evolve with technological advances and warfighters' requirements. The strategy should be designed to balance two major objectives: logistics support and improvements in cost-effectiveness of logistics products and services. PBL strategies vary depending on the age of the system, existing support infrastructure, organic (DoD) and commercial capabilities, and legislative and regulatory constraints. PBL strategies include assigning total system support responsibility, partnering contractors with DoD depots, and establishing performance-based agreements (PBAs) with operational commands and organizations (warfighters).

Javelin Weapon System. The Javelin weapon system is a medium-range, infrared-imaging, fire and forget, man-portable, antitank weapon system developed for the Army and the Marine Corps. It is composed of a tactical round and a command launch unit. The command launch unit is used for battlefield surveillance, target acquisition, missile launch, and damage assessment. The Javelin weapon system was designed, developed, and fabricated by Raytheon and Lockheed Martin Javelin Joint Venture (JV Contractor). Since the initial fielding of the Javelin weapon system in 1996, the JV Contractor has been responsible for maintenance of the Javelin weapon system through various interim contractor support contracts. The Javelin weapon system is an Acquisition Category I program. The project management office (PMO) for the Javelin weapon system is the Close Combat Weapon Systems Project Office, located at the Aviation and Missile Command, Redstone Arsenal, Huntsville, Alabama. The Program Executive Office, Tactical Missiles, Aviation and Missile Command, provides oversight of the PMO.

Reporting of Javelin PBL. The Assistant Secretary of the Army (Acquisition, Logistics, and Technology) reported to USD(AT&L) that PBL for the Javelin weapon system had been implemented. In a memorandum to USD(AT&L), "Performance-Based Logistics," July 8, 2002, the Assistant Secretary stated that, in accordance with the USD(AT&L) February 13, 2002, memorandum, acquisition managers of all Acquisition Category I and II programs had assessed their programs for implementation of PBL. Further, the Assistant Secretary provided the Army's PBL implementation schedule to USD(AT&L), which showed that PBL for the Javelin weapon system had been implemented. The implementation schedule also showed the PBL strategy for the Javelin weapon system, which included integrated product support provider (such as a prime contractor or a logistics command), PBAs with warfighters, PBAs with organic (DoD depots) and commercial providers, partnering, and contract incentives and penalties.

Objectives

Our overall audit objective was to evaluate the implementation of PBL for the Javelin weapon system. We also reviewed the management control program related to the audit objective. See Appendix A for a discussion of our scope and methodology and our review of the management control program. See Appendix B for prior coverage related to the objectives.

A. Javelin Performance-Based Logistics

The Army reported a PBL strategy for the Javelin weapon system to USD(AT&L). However, the strategy was not fully implemented because PBAs were not updated to reflect warfighter requirements and performance incentives and penalties were not incorporated into the life-cycle contractor support (LCCS)³ contract. As a result, the Army might not be realizing the benefits of PBL for the Javelin weapon system, such as improved readiness and decreased maintenance cost, and might be overstating its PBL progress

Federal Acquisition Regulation

According to Federal Acquisition Regulation Part 37.6, “Performance Based Contracting,” August 25, 2003, to the maximum extent possible, performance incentives, either positive or negative or both, are to be incorporated into a contract to encourage contractors to increase efficiency and maximize performance. Performance-based contracts describe the requirements in terms of results required and include measurable performance standards. Performance-based contracts also include incentives for superior performance and specific procedures for reducing payment to the contractor when services are not performed or do not meet contract requirements.

Reporting Performance-Based Logistics

The Army reported a PBL strategy for the Javelin weapon system to USD(AT&L). The PMO first reported the Javelin weapon system as having implemented PBL in its FY 2002 quarterly report to the Assistant Secretary of the Army (Acquisition, Logistics, and Technology). The quarterly report showed Javelin PBL as having been implemented in 1996, which was before DoD established a PBL requirement. The Assistant Secretary reported in his July 8, 2002, implementation schedule to USD(AT&L) that the Javelin weapon system had implemented PBL. In this schedule, the Assistant Secretary described his strategy for implementing PBL for the Javelin weapon system, which called for an integrated product support provider, PBAs with warfighters, PBAs with DoD depots and commercial providers, partnering arrangements, and contract incentives and penalties.

³ LCCS is a method of providing all or part of a system’s logistics support by contract, with the intention of continuing that support throughout the system’s life cycle.

Implementation of Performance-Based Logistics

The Javelin PBL strategy had not been fully implemented because PBAs had not been updated to reflect warfighter requirements and performance incentives and penalties, had not been incorporated into the LCCS contract. The implementation schedule that the Army provided to USD(AT&L) on July 8, 2002, reported that the PBL strategy for the Javelin weapon system, including PBAs with warfighters and contract incentives and penalties, had been implemented. As of August 23, 2004, the Army had not taken action to incorporate warfighters' requirements into a PBA and the LCCS contract did not include provisions for performance incentives and penalties. Therefore, the Army might not be realizing the benefits of PBL for the Javelin weapon system, such as improved readiness and decreased maintenance cost, and might be overstating its PBL progress.

Performance-Based Agreements. The PMO had not updated PBAs with warfighters to reflect PBL performance goals and objectives and to establish a target price based on a desired level of performance. According to the Product Support Guide, a written performance agreement between the program manager and the warfighter is the centerpiece of the program manager's overall PBL support strategy. Typically, a PBA identifies outcome performance goals and objectives, such as availability and cost, and establishes a target price based on the desired level of performance. Program managers and warfighters should work together to determine what is reasonable and attainable given the state of technology and resources. The Product Support Guide further states that reaching an understanding of what the warfighter wants in terms of performance is essential to the program manager's ability to develop a meaningful support strategy.

The PMO had established materiel fielding agreements for the Javelin weapon system with several warfighting commands, such as the U.S. Army Europe, the U.S. Army Forces Command, and the U.S. Army Special Operations Command. Those fielding agreements were established as far back as 1996, which predates PBL. The PMO considered those fielding agreements as the warfighter PBAs required for PBL implementation. However, those fielding agreements lacked PBL requirements such as PBL performance goals and objectives and a target price based on a desired level of performance. The purpose of a materiel fielding agreement is to document the warfighters' concurrence of the administrative and logistics support concept for the fielding of a weapon system and not to set a target price and desired level of performance. For example, warfighter and PMO responsibilities in those Javelin fielding agreements included staging and shipping of fielding packages, conducting joint inventory and transfer of accountable property, and designating a point of contact. As of August 23, 2004, those agreements had not been updated to reflect PBL requirements, which is almost 3 years after PBL requirements were issued in the November 6, 2001, Product Support Guide.

Performance Incentives and Penalties. The LCCS contract did not contain provisions for performance incentives and penalties that would support PBL implementation and motivate the JV Contractor to attain desired levels of weapon system performance. Federal Acquisition Regulation Part 37.6 requires

performance incentives to be incorporated into contracts to encourage contractors to increase efficiency and maximize performance. The Product Support Guide states that incentives should motivate the contractor to achieve performance levels of the highest quality consistent with economic efficiency. The Product Support Guide also references the USD(AT&L) “Guide to Incentive Strategies for Defense Acquisitions,” January 2001, which states that establishing incentives provides “the necessary framework and tools with which to effectively structure contractual incentives to achieve overall best value as part of a successful business relationship.”

On January 25, 2004, the Aviation and Missile Command awarded a 1-year, firm-fixed-price LCCS contract (W31P4Q-04-C-0046) to the JV Contractor for maintenance and repair of the Javelin weapon system. The contract had 9 option years. The contract included fielding, maintenance support, and training for Army, Army National Guard, Marine Corps, and foreign military sales customers.

The LCCS contract requires the contractor to maintain a 90-percent operational readiness rate and a 10-day repair turnaround time. However, the contract does not contain either positive or negative performance incentives tied to those requirements. The preferred PBL contracting approach is to use long-term contracts with incentives tied to performance. Incorporating incentives and penalties into the LCCS contract would support PBL implementation and would encourage the JV Contractor to optimize performance levels for the Javelin weapon system. Because the PMO had not fully implemented the PBL strategy for the Javelin weapon system, the Army might not be realizing the benefits of PBL for the Javelin weapon system, such as improved readiness and decreased maintenance cost, and may be overstating its PBL progress.

Management Comments on the Finding and Audit Response

Management Comments. The Acting DUSD(L&MR) and the Army disagreed with the draft report finding that the Javelin weapon system was incorrectly reported as PBL. The Acting DUSD(L&MR) and the Army stated that the Javelin LCCS program is considered to be a PBL program because the support arrangement is based on performance outcomes. See the Management Comments section of the report for the complete text of the comments.

Audit Response. After reviewing management comments and further discussion with personnel from the Office of the DUSD(L&MR), we agreed that the Army was not incorrect in reporting the Javelin as having implemented PBL and revised finding A accordingly. We also revised finding A to reflect that the Army’s reported strategy for implementing PBL for the Javelin weapon system had not been fully implemented.

Recommendations, Management Comments, and Audit Response

Deleted and Renumbered Recommendations. As a result of management comments and further discussion with personnel from the Office of the DUSD(L&MR) we deleted draft Recommendation A.1. and renumbered draft Recommendations A.2.a. and A.2.b. as A.1. and A.2., respectively. We also revised the finding discussion accordingly.

A. We recommend that the Project Manager, Close Combat Weapon Systems Project Office:

1. Update performance-based agreements with warfighters using the Javelin weapon system.

Management Comments. The Deputy Assistant Secretary of the Army (Integrated Logistics Support) (DASA[ILS]) provided the Army's comments on finding A. He stated in further discussion that his comments also incorporated comments from the Project Manager, Close Combat Weapon Systems Project Office. The DASA(ILS) partially concurred, stating that the Army considers materiel fielding agreements to be an acceptable form for a PBA and that the Army is developing a policy on PBAs. The intent of the policy is to allow flexibility in using several existing documents to satisfy the PBA requirement. Once the policy is approved and disseminated, the Javelin project manager will update materiel fielding agreements as necessary.

Audit Response. We consider the Army comments to be responsive. We agree that materiel fielding agreements can be an acceptable form of a PBA. However, to ensure that the Javelin weapon system obtains the desired level of performance required by the warfighter, current materiel fielding agreements need to be updated or PBAs need to be developed to ensure that the requirements in the current LCCS contract of a 90-percent operational readiness rate meets the performance requirements of warfighters using the Javelin weapon system.

2. Modify the life-cycle support contract for the Javelin weapon system to incorporate provisions for performance incentives and penalties that would support performance-based logistics and motivate the contractor to attain desired levels of performance for the Javelin weapon system.

Management Comments. The DASA(ILS) partially concurred, stating that contract incentives and penalties are the correct mechanism to use in PBL contracts; however, he also stated that they are not mandatory. In addition, the DASA(ILS) stated that when Javelin program requirements require a change in the LCCS contract, the PMO will reevaluate incentives and penalties included in the contract. The Acting DUSD(L&MR) stated that the Army should incorporate incentives and penalties into the PBL arrangement, but only when it is prudent to do so.

Audit Response. Although the DASA(ILS) partially concurred, we consider the comments to be responsive.

B. Economic Analysis

The PMO decision to award the LCCS contract to the JV Contractor was based on an economic analysis (EA) that was unsupported and incomplete. The EA was unsupported and incomplete because the PMO and the Office of the Deputy Assistant Secretary of the Army (Cost and Economics) (ODASA-CE)⁴ did not adhere to requirements for preparing and validating the EA. Specifically, the PMO did not ensure that the EA had a development plan, had a clear audit trail, and had been updated with key cost elements. Further, ODASA-CE had not fully validated the EA. As a result, the best alternative for the life-cycle support of the Javelin weapon system might not have been selected.

Army Economic Analysis Manual

The Army Economic Analysis Manual (EA Manual), February 2001, states that the EA process is a systematic approach to identify, analyze, and compare costs and benefits of alternative courses of action to achieve a given set of objectives. The process is used to determine the most efficient and effective use of resources. An EA is required for all ongoing programs and must be forwarded to Army headquarters for approval when there is a choice between two or more alternatives.

The EA Manual requires that ongoing programs be periodically assessed for their cost-effectiveness, which requires that the EA be regularly updated. Before preparing an EA, the program manager should prepare a detailed EA development plan and provide it to decision makers and other participants in the review and validation process of the EA. According to the EA Manual, all EAs require proper validation for currency, reasonableness, completeness, and compliance. EAs requiring Army headquarters approval should have a thorough validation, consisting of a comprehensive review of all costs and benefits, with a formally documented report. ODASA-CE, an agency under the Assistant Secretary of the Army (Financial Management and Comptroller), is the proponent for validating the EA.

Establishment of an Economic Analysis

The decision to award the LCCS contract to the JV Contractor was based on an EA that was unsupported and incomplete. In September 2001, the PMO prepared the “Javelin Life Cycle Support Concept Economic Analysis” for the Program Executive Office, Tactical Missiles, Aviation and Missile Command. The EA was in response to a USD(AT&L) request to provide a plan to implement Javelin LCCS. The EA compared the cost of an organic (DoD) life-cycle support concept

⁴ In our draft report, ODASA-CE was referred to as the Army Cost and Economic Analysis Center (CEAC).

with the cost of a contractor life-cycle support concept for the Javelin weapon system. The EA compared those costs over a period of 24 years. The PMO concluded that the EA showed no clear winner based on total cost. In addition, the PMO concluded that, in all cases, an LCCS-based alternative was the lowest cost. On October 4, 2001, ODASA-CE signed the memo stating that it concurred with the EA. On March 13, 2002, the Assistant Secretary of the Army (Acquisition, Logistics, and Technology) approved the recommendation to implement LCCS. On January 25, 2004, 2 years after ODASA-CE concurred with the EA, an LCCS contract, based on the September 2001 EA, was awarded to the JV Contractor.

Economic Analysis Guidelines

The EA was unsupported and incomplete because the PMO and ODASA-CE did not adhere to requirements for preparing and validating the EA. Specifically, the PMO did not ensure the EA had a development plan, had a clear audit trail, and had been updated with key cost elements. Further, ODASA-CE had not performed a comprehensive review of the EA supporting documentation to fully validate the EA.

Economic Analysis Development Plan. The PMO did not prepare an EA development plan before developing the EA for the Javelin weapon system. An EA development plan consists of the weapon system's mission, purpose, constraints, assumptions, cost elements, system description, and schedules. For a project of high dollar value, the EA development plan should be relatively detailed and should be provided to the decision maker and other participants in the review and validation process before the analysis is performed. PMO officials stated that an EA development plan was not needed because it was clear what the objective for the Javelin weapon system was when they compared other alternatives for life-cycle support. Also, because the PMO held regular briefings that discussed ongoing Javelin weapon system issues, personnel were fully aware of what the plans were. As a result of not having an EA development plan, we were not able to fully assess whether the PMO sufficiently accomplished the EA objective for the Javelin weapon system. ODASA-CE officials also stated that an EA development plan may have helped them in fully validating the EA.

Audit Trail. The PMO did not maintain an adequate audit trail to support key cost elements in the EA. The EA Manual states that there must be sufficient documentation of all assumptions, costs, methodology, results, and data to enable a person unfamiliar with the project to arrive at the same conclusions as the person who prepared the EA. The acceptance of the EA depends on the credibility of the cost estimates; therefore, the analyst must document data sources, provide the derivation of all costs, and maintain a clear audit trail. According to the EA Manual, it is of paramount importance to maintain an adequate audit trail to support the EA. The Javelin PMO did not have detailed documentation to support cost and benefit elements of the EA. Having detailed documentation would have allowed us to properly assess the EA. For example, PMO officials regularly cited the "Automated Cost Estimating Integrated Tools" model for supporting documentation of the EA. The model is a system used to

standardize and simplify the process of estimating the life-cycle costs to be included in an EA. However, the PMO did not have the source documentation to support cost estimates, such as overhead, used in the model. As a result, we were not able to arrive at the same conclusion as the PMO that an LCCS-based alternative was the lowest cost for the Javelin weapon system.

Updating the EA. The PMO did not update the EA to reflect changes that occurred during the 2 years between when the EA was approved and when the LCCS contract was awarded. The EA was prepared in September 2001 and validated October 4, 2001. When the PMO awarded the LCCS contract on January 25, 2004, the EA had not been updated. The EA Manual states that ongoing programs must be assessed periodically for their cost-effectiveness and that those assessments should include a comparison of actual performance with the approved project. To do that, an update to the program's EA is often required. Also, the EA Manual states that the EA should include all anticipated costs associated with each alternative over the life of the project, to include an estimate of all future costs through implementation, operation, and disposal of a project. According to PMO officials, the decision to proceed with LCCS was based on the EA. However, the LCCS contract that was awarded in January 2004 included costs that were not reflected in the EA. Costs not reflected in the EA included JV Contractor depot relocation, technical data packages, and contractor's profits. For example, the depot relocation cost of \$11.7 million, for the JV Contractor to relocate its maintenance facilities from Fayetteville, North Carolina, to Los Angeles, California, was included in the contract, but the EA had not been updated to reflect that cost. PMO officials acknowledged that the EA should be updated now that additional cost factors have been identified. The PMO omission of key cost elements from the EA distorts its outcome and, as a result, the PMO might not have chosen the most economical option for life-cycle support for the Javelin weapon system.

Validation. Although ODASA-CE officials prepared a memorandum on October 4, 2001, "Javelin Life Cycle Support Concept Economic Analysis," stating that they concurred with the EA, they did not fully validate the EA for the Javelin weapon system. The EA Manual states that validators should ensure that assumptions, constraints, and methodology are logical, reasonable, complete, and well documented and that conclusions and recommendations are reasonably supported by the analysis. ODASA-CE did not fully validate the EA because the PMO did not prepare an EA development plan and did not provide ODASA-CE with all key cost elements. In addition, ODASA-CE guidance on assessing the EA was based on telephone calls and office visits by the PMO. Further, ODASA-CE officials did not verify the underlying cost data provided by the PMO. ODASA-CE also did not use the detailed checklist in the EA Manual that provides validators a general guide to assist in the review and validation process. In addition, no formal report was prepared to assess ODASA-CE objectives and to document how ODASA-CE conclusions and recommendations were arrived at. According to ODASA-CE personnel, their focus on assessing the EA was to ensure that it consisted of only the necessary cost elements and that those cost elements were accurate. Without the proper validation of the underlying data, the conclusion regarding the overall validity of the EA cannot be supported.

Life-Cycle Contractor Support Alternative

The PMO prepared an EA in September 2001 and used it as the basis for choosing an LCCS alternative for the Javelin weapon system. The PMO awarded the Javelin LCCS contract to the JV Contractor on January 25, 2004. However, the EA was not supported by an EA development plan, did not address key cost elements, had not been updated, and had not been fully validated. As a result, the PMO might not have selected the best alternative for the life-cycle support of the Javelin weapon system.

Management Actions

On January 23, 2004, USD(AT&L) issued a memorandum, “Performance Based Logistics Business Case Analysis,” which provides guiding principles for preparing a PBL business case analysis (BCA).⁵ A BCA is a document in which results from various analyses, such as the EA, are used to validate the product support strategy. The memorandum requires that all BCAs be based on warfighter-stated performance requirements that are documented in a PBA. The Military Departments were directed to revise their PBL BCA guidance to incorporate the guiding principles provided in the memorandum. A USD(AT&L) March 2004 memorandum, “Performance-Based Logistics and the Business Case Analysis,” states that strategic planning guidance requires the Services to complete a BCA on all new and fielded Acquisition Category I and II programs by September 30, 2006.

In May 2004, the Deputy Assistant Secretary of the Army (Integrated Logistics Support) issued the “U.S. Army Implementation Guide: Performance-Based Logistics,” which requires that a BCA be prepared in implementing the PBL process. The guidance also states that BCAs requiring Army headquarters approval are to be validated by ODASA-CE. Although the Army’s guidance requiring that a BCA be prepared was issued in May 2004, as of August 20, 2004, the Army was still in the process of developing guidance on how to prepare a BCA. In addition, as of August 23, 2004, the Assistant Deputy Under Secretary of Defense (Logistics Plans and Programs) was in the process of drafting a revised comprehensive handbook for PBL BCAs.

Because our review showed that the decision to award the LCCS contract to the JV Contractor was not fully supported by the EA or properly validated by ODASA-CE, the PMO should update the EA. Once updated, the EA should be included in the BCA that is required by September 30, 2006, and the BCA should be validated by ODASA-CE. The BCA can then be used as the basis to reassess decisions on continuing the PBL support strategy for the Javelin weapon system.

⁵ A BCA is defined as a tool used to manage business process improvement activities from inception through implementation that identifies functional alternatives and presents economical and technical arguments for carrying out alternatives over the life cycle of a program to achieve stated business objectives or imperatives.

Management Comments on the Finding and Audit Response

Management Comments. The Acting DUSD(L&MR) disagreed with the report finding and stated that the EA that was conducted by the program manager and approved by the Army Cost and Economic Analysis Center, now the ODASA-CE, in October 2001 was in accordance with existing DoD guidance and procedures for PBL that were in place at that time.

The Deputy Assistant Secretary of the Army (Cost and Economics) also disagreed with the report finding that the EA was unsupported and incomplete and stated that his office performed a comprehensive review to fully validate the Javelin EA, to include conducting interviews with PMO officials and analyzing PMO documentation. In addition, he stated that the completion of an EA checklist and an EA development plan does not ensure an EA is fully validated.

Audit Response. As stated in this report, we attempted to obtain source documentation from the Javelin PMO and ODASA-CE to support the costs used in the Automated Cost Estimating Integrated Tools model. Neither office could provide source documentation to support all costs used in the model, such as spare part unit costs, mean time between failure, and labor rates. Further, the EA Manual states that “it is essential to adequately document the EA [and] that there must be sufficient documentation of all assumptions, costs, methodology, results and data to enable a person unfamiliar with the project to arrive at the same conclusion as the person who prepares it.” The EA Manual further states that the EAs are subject to many levels of review, including the DoD Inspector General, adding: “These reviewers may not be as familiar with the EA as the analyst that prepared it and each will critically analyze and pass judgment on the EAs validity and adequacy. For this reason it is of paramount importance to maintain an adequate audit trail to support your conclusions. The documentation must provide an audit trail that permits validation of all costs and benefits.”

Without an adequate audit trail, we were not able to arrive at the same conclusion about the EA as the PMO or ODASA-CE. Therefore, we could not validate the costs and benefits included in the EA. We agree that an EA checklist and an EA development plan do not ensure a fully validated EA; however, if properly used, those tools would have ensured that all Javelin cost estimates were supported by valid source documentation and that the EA was performed based on a clearly defined objective that was measurable, realistic, achievable, and results-oriented. Further, a checklist would have provided assurances that the EA could “stand on its own,” allow an independent reviewer to reach the same conclusion, and ensure supporting documentation was adequate for reviewers to duplicate costs and estimates used in the EA.

Recommendations, Management Comments, and Audit Response

B.1. We recommend that the Project Manager, Close Combat Weapon Systems Project Office:

- a. Update the economic analysis and incorporate it into the business case analysis for the Javelin weapon system.
- b. Prepare a business case analysis for the Javelin weapon system and, based on the results of that analysis, reassess the Javelin weapon system logistics support strategy.

Management Comments. The DASA(ILS) partially concurred, stating that the Javelin EA was developed and approved before the establishment of Defense and Army guidance on BCAs. He also stated that the EA would be updated to a BCA when contract situations require it, but that until Army BCA guidance is developed, the Army would continue to use the interim guide that was prepared by CEAC. The Acting DUSD(L&MR) stated that the Army will be expected to reassess the BCA and update the EA to a BCA when situations require it.

Audit Response. Management comments are responsive.

B.2. We recommend that the Assistant Secretary of the Army (Financial Management and Comptroller) direct the Deputy Assistant Secretary of the Army for Cost and Economics to fully validate the business case analysis for the Javelin weapon system and formally document the results and conclusions of that validation.

Management Comments. The Deputy Assistant Secretary of the Army (Cost and Economics) concurred and stated that upon receipt of the BCA for the Javelin weapon system, his office will fully validate the BCA and document the results in accordance with established procedures.

Appendix A. Scope and Methodology

We performed the audit at the Close Combat Weapon Systems Project Office, Aviation and Missile Command, Huntsville, Alabama. We contacted personnel at the Office of the USD(AT&L); the Office of the Assistant Secretary of the Army (Acquisition, Logistics, and Technology); the Army Materiel Command; the Program Executive Office, Tactical Missiles; and ODASA-CE.

We assessed the adequacy of the Close Combat Weapon Systems Project Office implementation of PBL by reviewing DoD and Army policies and regulations regarding responsibilities and procedures for implementing PBL and reviewed FY 2002 quarterly status reports. We also reviewed the Quadrennial Defense Review and DoD directives pertaining to PBL. We reviewed the adequacy of the EA by reviewing Army guidance and cost documents. We assessed the LCCS contract for PBL provisions.

We also reviewed the Army implementation schedule for PBL and interviewed PMO officials on the status of implementing PBL. Additionally, we interviewed ODASA-CE officials to discuss the validation process for the EA and reviewed their October 4, 2001, memorandum that concurred with the PMO conclusion in the EA. Documents we reviewed were dated from April 1996 through August 2004.

We performed this audit from December 2003 through September 2004 in accordance with generally accepted government auditing standards.

Use of Computer-Processed Data. We did not rely on the use of computer-processed data to perform this audit.

Government Accountability Office High-Risk Area. The Government Accountability Office has identified several high-risk areas in DoD. This report provides coverage of the Defense Weapon Systems Acquisition high-risk area.

Management Control Program Review

DoD Directive 5010.38, "Management Control Program," August 26, 1996, and DoD Instruction 5010.40, "Management Control Program Procedures," August 28, 1996, require DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Scope of the Review of the Management Control Program. We reviewed the Close Combat Weapon Systems Project Office's process for reporting PBL for the Javelin weapon system and the office's procedures for supporting and completing the EA. We also reviewed the adequacy of management's self-evaluation of those processes and procedures.

Adequacy of Management Controls. We identified material management control weaknesses within the Army, as defined by DoD Instruction 5010.40. The processes and procedures used by the Army were insufficient to ensure that PBL for the Javelin weapon system had been fully implemented and that the Javelin EA was supported, complete, and fully validated. The recommendations, if implemented, will correct the conditions cited. A copy of the report will be provided to the senior official responsible for management controls in the Army.

Adequacy of Management's Self-Evaluation. The Army did not identify the reporting of PBL implementation and preparing and validating the EA as assessable units and, therefore, did not identify or report the material management control weaknesses identified by the audit.

Appendix B. Prior Coverage

During the last 5 years, the Government Accountability Office (GAO), the Department of Defense Inspector General (DoD IG), and the Navy have issued 12 reports related to implementing PBL. Unrestricted GAO reports can be accessed over the Internet at <http://www.gao.gov>. Unrestricted DoD IG reports can be accessed at <http://www.dodig.mil/audit/reports>.

GAO

GAO Report No. GAO-04-715, “Defense Management: Opportunities to Enhance the Implementation of Performance-Based Logistics,” August 16, 2004

GAO Report No. GAO-02-1049, “Contract Management: Guidance Needed for Using Performance-Based Service Contracting,” September 23, 2002

GAO Report No. GAO-02-306, “Defense Logistics: Opportunities to Improve the Army’s and the Navy’s Decision-making Process for Weapons Systems Support,”
February 28, 2002

GAO Report No. GAO-01-618, “Defense Logistics: Air Force Lacks Data to Assess Contractor Logistics Support Approaches,” September 7, 2001

DoD IG

DoD IG Report No. D-2004-110, “The Military Departments’ Implementation of Performance-Based Logistics in Support of Weapon Systems,” August 23, 2004

DoD IG Report No. D-2004-021, “Effectiveness of Maintenance Work Performed Under Contract FA4452-01-C-0001 at Andrews Air Force Base,”
November 19, 2003

DoD IG Report No. D-2003-120, “F/A-18E/F Integrated Readiness Support Teaming Program,” August 8, 2003

DoD IG Report No. D-2002-112, “Industrial Prime Vendor Program at the Air Force Air Logistics Centers,” June 20, 2002

DoD IG Report No. D-2000-180, “Commercial Contract for Total Logistics Support of Aircraft Auxiliary Power Units,” August 31, 2000

Navy

Naval Audit Service Report No. N2003-0050, "Contractor Logistics Support Oversight," May 15, 2003

Naval Audit Service Report No. N2003-0024, "Contractor Logistics Support at the Naval Air Systems Command," January 29, 2003

Naval Audit Service Report No. N2002-0069, "Contractor Logistics Support at the Space and Naval Warfare Systems Command," August 8, 2002

Appendix C. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense (Comptroller)/Chief Financial Officer
Deputy Chief Financial Officer
Deputy Comptroller (Program/Budget)
Under Secretary of Defense for Acquisition, Technology, and Logistics
Acting Deputy Under Secretary of Defense (Logistics and Materiel Readiness)
Assistant Deputy Under Secretary of Defense (Logistics Plans and Programs)
Director, Program Analysis and Evaluation
Director, Defense Procurement and Acquisition Policy

Joint Staff

Director, Joint Staff

Department of the Army

Assistant Secretary of the Army (Acquisition, Logistics, and Technology)
Deputy Assistant Secretary of the Army (Integrated Logistics Support)
Assistant Secretary of the Army (Financial Management and Comptroller)
Deputy Assistant Secretary of the Army (Cost and Economics)
Auditor General, Department of the Army
Commander, Aviation and Missile Command
Commander, Program Executive Office, Tactical Missiles
Project Manager, Close Combat Weapon Systems Project Office

Department of the Navy

Naval Inspector General
Auditor General, Department of the Navy

Department of the Air Force

Auditor General, Department of the Air Force

Combatant Command

Inspector General, U.S. Joint Forces Command

Other Defense Organizations

Director, Defense Logistics Agency

Non-Defense Federal Organization

Office of Management and Budget

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations

Senate Subcommittee on Defense, Committee on Appropriations

Senate Committee on Armed Services

Senate Committee on Governmental Affairs

House Committee on Appropriations

House Subcommittee on Defense, Committee on Appropriations

House Committee on Armed Services

House Committee on Government Reform

House Subcommittee on Government Efficiency and Financial Management, Committee on Government Reform

House Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform

House Subcommittee on Technology, Information Policy, Intergovernmental Relations, and the Census, Committee on Government Reform

Acting Deputy Under Secretary of Defense (Logistics and Materiel Readiness) Comments

Final Report
Reference



DEPUTY UNDER SECRETARY OF DEFENSE FOR
LOGISTICS AND MATERIEL READINESS
3500 DEFENSE PENTAGON
WASHINGTON, DC 20301-3500

DEC 3 2004

MEMORANDUM FOR PROGRAM DIRECTOR, READINESS AND LOGISTICS SUPPORT
OFFICE OF THE INSPECTOR GENERAL

THROUGH: DIRECTOR, ACQUISITION RESOURCES AND ANALYSIS *78 12/13/04*

SUBJECT: Response to DODIG Draft Report D2004LH-0047, "Report on Implementation of
Performance-Based Logistics for the Javelin Weapon System," October 4, 2004

I appreciate the opportunity to comment on the subject report. Although the specific recommendations on the Javelin Performance-Based Logistics (PBL) contract and performance agreements are addressed to the Army, I would like to provide comment since we believe the Army acted responsibly in following OSD guidance that was in place at the time in conducting the Economic Analysis and awarding the PBL contract.

The Javelin weapon system represents one of the earliest examples of the Army's pursuit of PBL strategies. The strategy pursued and employed as represented in the contract awarded in January 2004 was in accordance with existing PBL guidance and established procedures that were in place at that time. The Army based its decision to pursue PBL as a follow-on to the existing support arrangement which was in place since 1996. As a result, the strategy changed from a typical Contractor Logistics Support arrangement based on transactions to a Logistics Support arrangement based on performance outcomes – in this case, system availability. We, therefore, believe that the Army should continue PBL reporting on the Javelin. We agree that the Army should include incorporation of incentives and penalties to the PBL arrangement, but only when it is prudent to do so, such as when there is cause for re-competing the support arrangement.

Likewise, the economic analysis that was conducted by the Program Manager (PM) and approved by the Army Cost and Economic Analysis Center (CEAC) in October 2001 was in accordance with existing OSD guidance and procedures for PBL that were in place at that time. As stated in the draft report, OSD-AT&L published guiding principles for preparing a Business Case Analysis (BCA) in January 2004. We would expect that the Army will reassess the need for conducting a BCA for the Javelin and update the economic analysis to a BCA when program circumstances/changes require an update.

Questions regarding this memorandum may be directed to Mr. Anthony Stampone at 703-614-3838 or at Anthony.Stampone@osd.mil.

Bradley Berkson
Acting

cc: SA(ALT)



Revised

Department of the Army Comments



DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY
ACQUISITION LOGISTICS AND TECHNOLOGY
DEPUTY ASSISTANT SECRETARY OF THE ARMY
(INTEGRATED LOGISTICS SUPPORT)
103 ARMY PENTAGON
WASHINGTON DC 20310-0103

November 23, 2004

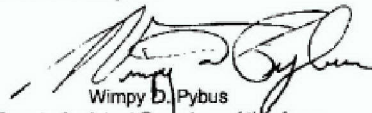
SAAL-ZL

MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE,
400 ARMY NAVY DRIVE, ARLINGTON, VIRGINIA 22202

SUBJECT: Army Comments to Draft DoDIG Report on Implementation of
Performance-Based Logistics for the Javelin Weapon System
(Project No. D2004LH-0047)

We have reviewed the subject draft report and have provided our comments at the
enclosure.

The points of contact for this action are Mr. Larry W. Hill, DSN 664-7450, commercial
(703) 604-7450 or e-mail: larry.w.hill1@us.army.mil.


Wimpy D. Pybus
Deputy Assistant Secretary of the Army
Integrated Logistics Support

Enclosure

CF:
DIRECTOR, ARMY AUDIT AGENCY

Army Comments to Draft DoDIG Report on Implementation of Performance-Based Logistics for the Javelin Weapon System (Project No. D2004LH-0047)

1. Recommendation A1. Nonconcur. The Army and OSD consider the Javelin LCCS program to be a PBL since the performance outcome for the Javelin PBL is a 90% operational readiness rate. This performance outcome fits the OSD definition of a PBL. The Javelin PBL strategy was approved by the Army Acquisition Executive (AAE) and the Army G4 (then the DA DCSLOG) in a 13 Mar 02 memorandum. PBL has evolved from the Section 912 studies of Product Support Reengineering and the Reduction of Total Ownership Costs (RTOC) program which began in 1998. The Javelin PBL strategy was begun under the auspices of RTOC, but has migrated (along with the migration of product support/RTOC to PBL) to fit the goals and definition of PBL.

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2. Recommendation A2a. Partially concur. The Javelin support strategy was approved by the Army prior to the majority of the OSD PBL policy. The Army considers Materiel Fielding Agreements (MFA) to be an acceptable form for a Performance Based Agreement (PBA). The Army PBL IPT currently has a sub-IPT developing Army policy on PBAs. This policy will state that MFAs can serve as a PBA with some modification to include additional requirements such as performance outcomes and other information that would be contained in a PBA. The intent of Army policy is to allow flexibility in using several existing documents to satisfy the PBA requirement. After the PBA policy is approved and disseminated, the Javelin PM will be required to update their PBAs, as necessary. Also, as the Javelin PBL contract requirements change, the PBAs will be updated as required.

Renumbered
as
Recommendation A.1.

3. Recommendation A2b. Partially concur. While the Army agrees that contract incentives/disincentives are the correct mechanism to use in PBL contracts, incentives/disincentives are the preferred approach, not the mandatory approach. The contractor is incentivized in that the contract could be terminated if the contractor fails to meet the performance requirements in the contract. When Javelin program requirements change to require a change in the PBL contract, Javelin contract incentives/disincentives will be relooked.

Renumbered
as
Recommendation A.2.

4. Recommendation B1a and b. Partially concur. The Javelin PBL was approved based on an Economic Analysis (EA) which predated OSD and Army guidance on Business Case Analyses (BCAs). The EA was validated by CEAC. Therefore, the Army will require the PM to update the EA to a BCA when program and contract situations require it. Additionally, an Army PBL IPT sub-IPT is developing BCA policy and guidance for the Army. Until the Army BCA guidance is published, an interim Army BCA guide is in effect. This interim guide, prepared by CEAC, is an EA guide. Therefore, the Javelin did comply with the OSD and Army guidance in effect at the time the Javelin PBL strategy was being developed.

5. Recommendation B2. Concur. When program situations require the current EA to be updated to a BCA, CEAC will be required to independently validate the BCA.



DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY
FINANCIAL MANAGEMENT AND COMPTROLLER
109 ARMY PENTAGON
WASHINGTON, DC 20310-0109

December 3, 2004

SAFM-CEA-WS

MEMORANDUM FOR DOD INSPECTOR GENERAL, ATTN: PROGRAM
DIRECTOR, READINESS AND LOGISTICS SUPPORT,
400 ARMY NAVY DRIVE, ARLINGTON, VIRGINIA
22202-4704

SUBJECT: Office of the Deputy Assistant Secretary of the Army for Cost and
Economics Comments to IG Report on Implementation of Performance-Based Logistics
for the Javelin Weapon System (Project No. D2004LH-0047)

1. This is in response to the DODIG 4 Oct 04 memorandum, "Implementation of Performance-Based Logistics for the Javelin Weapon System." We are providing comments on the economic analysis portion of the report.
2. Overview. The DODIG reviewed the Javelin program's implementation of performance-based logistics to include the performance agreements, contract, schedule, and economic analysis. We strongly disagree with the report conclusion that the economic analysis was unsupported and incomplete.
3. Report Summary and Findings. The Executive Summary of the report states that, "the Program Management Office (PMO) decision to award the life cycle contractor support (LCCS) contract to the Joint Venture (JV) was based on an economic analysis (EA) that was unsupported and incomplete." Specific Findings in Section B titled, "Economic Analysis" state, "That the EA was unsupported and incomplete because the PMO and the Army Cost and Economic Analysis Center (CEAC) did not adhere to requirements for preparing and validating it. Specifically, the PMO did not ensure that the EA had an EA development plan, had a clear audit trail and had been updated with key cost elements. Further, CEAC had not fully validated the EA."
4. Comments. The Office of the Deputy Assistant Secretary of the Army for Cost and Economics (ODASA-CE), formerly known as CEAC, performed a comprehensive review to fully validate the Javelin EA. We will address each of the highlighted findings below.
 - a. **The EA was unsupported and incomplete.** The EA review of the methodology and factors included interviews and documentation reviews with PMO cost analysts who performed the EA. Further, the context of each line within the Automated Cost

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ODASA-CE

Estimating-Integrated Tools (ACEIT) model, the Army's standard cost model, containing the EA was reviewed and validated to include the assumptions, constraints, equations, background of each variable and factor, and documentation for applicability and balance throughout the validation process.

b. **The PMO did not ensure that the EA had an EA development plan [EADP], had a clear audit trail and had been updated with key cost elements.** The preparation of an EADP does not ensure a fully validated EA. ODASA-CE was a member of the Javelin Integrated Product Team (IPT) from the beginning. The IPT comprised of functional personnel from logistics and cost areas as well as legal and contracting, developed the overall EA review process. The EADP is not a requirement and the overall analysis plan and options were developed and approved by the IPT. Since a list of missing "key cost elements" was not provided in the DODIG report, it is impossible to address concerns in this area.

c. **CEAC had not fully validated the EA.** The Javelin EA was validated through an extensive review of the EA cost documentation in the ACEIT file in coordination with PMO cost analysts. This included a review of the source and derivation of all costs contained in the EA. The report also noted that analysts did not use the checklist provided in the EA Manual and there was no formal report. These two issues are covered below.

Checklist. The checklist referenced in the DA EA Manual at Appendix M is a set of questions developed as a tool to guide the preparation, review, and validation of EAs. This list is not intended nor required to be a piece of documentation for the validation of an EA. The ODASA-CE validation of the EA did cover the necessary questions inherent in ensuring that the EA was complete, comprehensive, and properly conducted according to the guidelines in the DA EA Manual. Also, at that time, there was no unique guidance for PBL validations.

Formal Report. DA approved cost estimates are documented in the Cost Analysis Brief (CAB) and the ACEIT file of the system cost estimate. This documentation was considered to be sufficient by the CEAC Director once the EA was determined to be valid. It is standard practice to include all documentation as an automated file within the ACEIT cost model. Therefore, a paper report was not required which was the Director's prerogative as the proponent of the DA EA Manual.

5. **Report Recommendation.** The Army's draft PBL Guidance will require periodic updates of analyses used to determine the supportability approach. We concur with the draft report Recommendation B.2. Upon receipt of the business case analysis for the Javelin weapon system, ODASA-CE will fully validate the business case analysis for the Javelin weapon system and document the results in accordance with established procedures.

6. The process used by ODASA-CE to validate the EA based on the program definition at the time of review was a hands-on and in-depth review that was conducted with the PMO analysts. The validated ACEIT file serves as formal documentation of the effort, and the ODASA-CE memorandum confirms validation and notes discrepancies. We hope that this clarifies the process and procedures used by ODASA-CE. We appreciate the opportunity to comment on the draft report. Questions regarding our comment may be addressed to Mr. Sean Vessey, Chief, Weapon Systems Division, at (703) 601-4138.

Stephen T. Bagby

Stephen T. Bagby
Deputy Assistant Secretary of the Army
(Cost and Economics)

CF:
USD(AL&T)
DIRECTOR, ARMY AUDIT AGENCY

Team Members

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